

AMENDMENTS TO CLAIMS

The listing of claims below will replace all prior versions and listings of claims in the application.

Claim 1. (Original) An echo canceller for removing an echo component by using an adoptive algorithm, the echo canceller comprising:

a pseudo-echo forming means including a pseudo-echo generation section for generating a pseudo-echo signal in accordance with a tap coefficient and a far-end input signal, and a coefficient update section for updating the tap coefficient;

a sending filter means for removing a low-frequency component included in a near-end input signal component;

a pseudo-echo filter means for removing a low-frequency component included in the pseudo-echo signal from the pseudo-echo forming means; and

an echo cancellation means for removing an echo component included in the near-end input signal component passing through the sending filter means, and an echo component in accordance with a pseudo-echo signal passing the pseudo-echo filter means.

Claim 2. (Original) The echo canceller according to Claim 1, wherein the coefficient update section updates the tap coefficient in accordance with a far-end input signal delayed by a period corresponding to the delay of the sending filter means and the pseudo-echo filter means.

Claim 3. (Original) The echo canceller according to Claim 1, further comprising a receiving filter means for removing a low-frequency component from the far-end input signal component, the receiving filter means being disposed between a far-end input terminal and the pseudo-echo forming means.

Claim 4. (Previously presented) The echo canceller according to Claim 1, wherein the sending filter means, the pseudo-echo filter means, and the receiving filter means are variable filters;

the echo canceller further comprising a switch control means which detects presence or absence of a second band component on a sending path and a receiving path, the second band component being different from the first band component that is a conventional telephone band, the echo canceller controlling the removal frequency band of the sending filter means, the pseudo-echo filter means, and the receiving filter means in accordance with a result obtained by the detecting of the second band component.

Claim 5. (Original) The echo canceller according to Claim 4, wherein the switch control means detects a low-frequency component included in the far-end input signal component and the near-end input signal component, and the frequency band to be removed by the sending filter means, the pseudo-echo filter means, and the receiving filter means is controlled in accordance with a power of the detected low-frequency component.

Claim 6. (Original) The echo canceller according to Claim 4, wherein the switch control means controls a frequency band to be removed by the sending filter means, the pseudo-echo filter means, and the receiving filter means in accordance with a degree of influence on the tap coefficient updated by the coefficient update section by means of a non-fixed offset component of the far-end input signal in the low-frequency component.

Claim 7. (Original) The echo canceller according to Claim 6, wherein the switch control means obtains a mean value of the tap coefficients updated by the coefficient update section, and the tap coefficient determines a degree of influence by the offset component in the low-frequency component included in the far-end input signal in accordance with a result of comparison between the mean value of the tap coefficient and a predetermined value.

Claim 8. (Original) The echo canceller according to Claim 1, wherein the sending filter means, the pseudo-echo filter means, and the receiving filter means are variable filters; the echo canceller further comprising a filter characteristics control means for controlling the frequency band to be removed by the sending filter means, the pseudo-echo filter means, and the receiving filter means, in accordance with the tap length specified in the pseudo-echo forming means.